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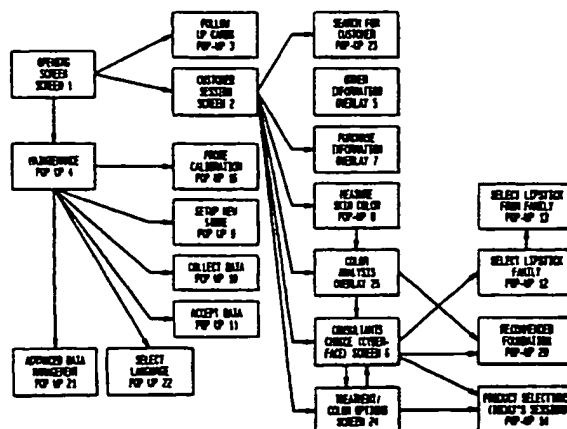
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- (71) Applicant (for AE, AU, BB, CA, CY, GB, GD, GH, GM, IE, IL, KE, LC, LK, LS, MN, MW, MZ, NZ, SD, SG, SL, SZ, TT, TZ, UG, ZA, ZW only): UNILEVER PLC [GB/GB]; Unilever House, Blackfriars, London EC4P 4BQ (GB).
- (71) Applicant (for all designated States except AE, AU, BB, CA, CY, GB, GD, GH, GM, IE, IL, IN, KE, LC, LK, LS, MN, MW, MZ, NZ, SD, SG, SL, SZ, TT, TZ, UG, ZA, ZW): UNILEVER NV [NL/NL]; Weena 455, NL-3013 AL Rotterdam (NL).
- (71) Applicant (for IN only): HINDUSTAN LEVER LIMITED [IN/IN]; Hindustan Lever House, 165/166 Backbay Reclamation, Mumbai 400 020, Maharashtra (IN).
- (72) Inventor: FLYNN, Madeline, Demayo; Elizabeth Arden Co., 40 Merritt Boulevard, Trumbull, CT 06611 (US).
- (74) Agents: ROTS, Maria, Johanna, Francisca et al.; Unilever PLC, Patent Department, Colworth House, Sharnbrook, Bedford, Bedfordshire MK44 1LQ (GB).
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[Continued on next page]

(54) Title: A SYSTEM FOR COLOUR COSMETIC SELECTION



(57) Abstract: A method and system is provided for selecting a facial colour cosmetic scheme. Apparatus employed for the system includes a computer module with a colour monitor screen, a spectrophotometer for measuring a customer's skin colour and a device for transferring the measured colour information from the spectrophotometer to the computer module for entry into a program allowing visualisation of a model face with skin colour matched to that of the customer. The method includes measuring via spectrophotometer a customer's facial colour, transmitting information on that colour to the module for display on the model face appearing in the monitor, allowing the customer to select at least one colour for an area of the face to be covered by a cosmetic product, and then displaying the visualised model face with the selected colour. The system and method allow a customer to visualise the colour combination without the necessity of using the actual colour cosmetic on their own face for evaluation purposes.



IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

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A SYSTEM FOR COLOUR COSMETIC SELECTION

Field of the Invention

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The present invention relates to a method and implementing apparatus for assisting a customer in selecting colour cosmetic products.

10 BACKGROUND OF THE INVENTION & PRIOR ART

Colour cosmetics are highly personal to an individual. An optimum shade is selected having relevance to a customer's skin coloration and to a colour fancied by the customer.

15

Assistance in the selection of an optimal colour shade is available to help the consumer. Clinique and Clarion have installed computers at sales counters for use by customers. Information on colour, shade, oiliness and other properties of a customer's skin are punched into the computer which then determines the company's most closely matching product. Two major companies, Prescriptives (Division of Estee Lauder) and Visage (Division of Revlon) have for some time practiced a manual system for evaluating a subject's skin colour. The sales person is trained through the use of match cards to identify a user's matching skin foundation. Unfortunately manual systems suffer from poor reproducibility. Extensive training must also be invested in a sales person.

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German patent 41 10 299 C1 (Erdtmann) discloses the use of a facial sensor for reading skin property values and then utilising the measured values in selecting an optimum skin product. Subsequently, the information is sent to an automatic cosmetic

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dispensing system for blending selected additives to formulate the selected product.

U.S. Patent 5,622,692 (Rigg et al.) reports a system for
5 customising a facial foundation product at point of sale to a
customer. Three essential elements are present. They include a
skin analyser for reading skin properties, a programmable device
receiving the reading and correlating it with an optimal formula
and a formulation machine for preparing the facial foundation
10 product from various cosmetic chemical compositions. Technology
described in this patent has commercially been embodied in
Elizabeth Arden's Custom Colour system available for many years in
major department stores.

15 Arden's system has been a significant advance in the art.
However, it suffers from certain deficiencies, including the
inability of customers to evaluate different colour cosmetics in
the context of their own skin colouration, and in juxtaposition to
combinations of different facial makeover products. Thus it would
20 be desirable to have visualised a lipstick and a foundation, eye
shadow and/or blush on a colour interactive basis. Especially
desirable would be to evaluate the interaction of the various
colour cosmetics without actually having to place these on one's
own face.

25 Accordingly, it is an advantage of the present invention to
provide a system and apparatus for selecting a facial colour
cosmetic scheme from a palette of different shades and makeup
products without requiring the actual placement of these products
30 on the customer's face.

Another advantage of the present invention is to provide a system
and apparatus for selecting a facial colour cosmetic scheme
allowing rapid visualisation of different coloured makeup

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permutations on various areas of the face in a simultaneous manner.

SUMMARY OF THE INVENTION

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The present invention provides a method for selecting a facial cosmetic colour scheme, the method including:

- (i) providing a computer module including a color monitor screen and a spectrophotometer;
- 10 (ii) measuring a customer's facial colour with the spectrophotometer;
- (iii) transmitting information on the measured facial colour to the computer module for display of that colour on a model face generated on the monitor
- 15 screen;
- (iv) allowing the customer to select at least one area of the face to be coloured with a colour cosmetic product; and
- (v) colouring the area of the model face with the
- 20 selected colour.

Optionally, a further step may be added involving printing on paper the coloured display from step (v) appearing on the monitor. By this method, a customer can select eye shadow, eye liner,

25 lipstick, lip liner, blush, foundation and/or powder with selected colours, at least some of the combination having been first evaluated on a model face generated on the computer monitor screen. A program controlling the colour and selection scheme can further be included to correlate a vendor's products which will

30 achieve the selected colour palette.

According to a further aspect, the present invention provides a system for selecting a facial colour cosmetic scheme, the system including:

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- (i) a computer module connected with a colour monitor screen;
- (ii) a spectrophotometer for measuring skin colour;
- (iii) a mechanism for transfer of facial colour data
5 obtained from measurements with the spectrometer over
to the computer module and transmission onto the
monitor screen; and
- (iv) an interactive program displayed on the monitor
allowing the customer to select at least one colour
10 for application to an area of a model face appearing
on the monitor.

BRIEF DESCRIPTION OF THE DRAWINGS

15 The various objects, features and advantages of the present
invention will become more readily apparent from consideration of
the following drawing in which:

Fig. 1 shows a flow chart diagramming a program used in the
20 system of the invention for selecting facial colour cosmetic
schemes;

Fig. 2 shows Screen 2 of the program;

25 Fig. 3 shows Pop-Up Screen 3 of the program;

Fig. 4 shows Pop-Up Screen 4 of the program;

Fig. 5 shows Overlay 5 of the program;

30 Fig. 6 shows Screen 6 of the program;

Fig. 7 shows Overlay 7 of the program;

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Fig. 8 shows Pop-Up Screen 8 of the program;

Fig. 9 shows Pop-Up Screen 9 of the program;

5 Fig. 10 shows Pop-Up Screen 10 of the program;

Fig. 11 shows Pop-Up Screen 11 of the program;

Fig. 12 shows Pop-Up Screen 12 of the program;

10 Fig. 13 shows Pop-Up Screen 13 of the program;

Fig. 14 shows Pop-Up Screen 14 of the program;

15 Fig. 15 shows Overlay Screen 15 of the program;

Fig. 16 shows Pop-Up Screen 16 through 19 of the program;

Fig. 17 shows Pop-Up Screen 20 of the program;

20 Fig. 18 shows Pop-Up Screen 21 of the program;

Fig. 19 shows Pop-Up Screen 22 of the program;

25 Fig. 20 shows Pop-Up Screen 23 of the program;

Fig. 21 shows Screen 24 of the program;

Fig. 22 shows Overlay 25 of the program; and

30 Fig. 23 shows a printout of a stylised model face provided as a printout from the method according to the present invention including recommendation for various different types of colour cosmetics.

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DETAILED DESCRIPTION OF THE INVENTION

5 Now it has been found that a customer can evaluate how different colour cosmetics can interact by first visualising different colours on different areas of the face through computerised painting of a model face upon a monitor screen. In this system a customer is allowed to select colours to be placed on different
10 areas of the model face. A reiterative procedure then occurs. This involves the customer selecting a colour, having the program paint the selected colour onto the stylised model face and then allowing the customer to evaluate the result. No longer must a customer actually try the product on his or her own face. A very
15 rapid and clean evaluation can occur through use of the visualised model face.

A customer's actual facial colour can be measured by a spectrophotometer/colorimeter of a type having a visible light
20 source, such as light emitting diodes (LED), xenon-arc, tungsten-halogen and similar type in the wavelength range of 400-900 nm. The visible light source may form the sensor portion of the spectrophotometer/colorimeter. Both visible and infrared wavelength light may be utilised in connection with the sensor
25 portion. Suitable skin analysers are commercially available from Minolta Camera Co. Ltd., Japan and from Colortec Associates. Actual skin colour normally is measured around neckline areas which are free of a customer's foundation or other cover-up cosmetics.

30 Measurement starts by cleaning the areas preparatory to a reading. The spectrophotometer/colorimeter is then placed in proximity to the cleaned facial area. Visible light emitted in the 400-900 nm range by the device will be reflected off the skin surface and the

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reflective wavelength measured. It is recommended that at least five skin readings along the neck/jaw line region be taken. Total time for the reading requires approximately 30 seconds. A cable connecting the spectrophotometer/colorimeter to the computer module transmits the measured information on L, a and b thereby inputting a customer's natural skin colour parameters into the database. Alternatively the measured values can be read by the measuring consultant directly off of the spectrophotometer/colorimeter and manually banked into the computer module by typing the information on a linked keyboard.

By the term "computer module" is meant any programmable device capable of processing information. Normally these are personal computers.

15

Fig. 1 is a flow chart of a program according to one embodiment of this invention. After the opening screen, a user is introduced to Screen 2 known as the 'customer session'. Client information is obtained via this screen through either a swipe card, entry via a keyboard or from a database. The screen remains active (buttons are available) when overlays are displayed. Fig. 1 provides a view of Screen 2.

A Pop-up Screen 3 next appears with comments and client information to prompt follow-up calls. This screen can be used for contacting the client to remind them to visit the store when their cosmetic supply may be low. Fig. 3 illustrates the screen.

Pop-up Screen 4 covering 'Maintenance' is then available for appearance. This pop-up screen has options for calibration and data handling. Fig. 4 sets forth the screen.

Other information is collected with Overlay Screen 5. The Overlay screen selects/changes information about skin, beauty habits, type

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and brand of products used. Overlay Screens 2 and the buttons on Screen 2 remain active. Fig. 5 describes Overlay Screen 5.

Screen 6 provides a 'Consultant's Choice'. This screen shows effects of colour palette, using client's skin colour. Information on the client's skin colour is obtained through application of a hand-held spectrophotometer against areas of the face not likely to be covered by makeup. These areas include the neck and under chin areas. The cosmetic 'look' can either be based on skin colour (skin recommendation), lipstick colour (colour family), or a specific look. Depending on selections, a list of typically five 'looks' is created, and selecting (another look) displays next look in the series. Fig. 6 sets forth Screen 6.

Purchase information is achieved in Overlay Screen 7. This screen with previous and current purchase information (overlay to screen 2) is ordered by visit date. It contains information from up to the last five visits. Purchase information includes number, product type, product name and product number. Fig. 7 sets forth the purchase information screen.

Pop-up Screen 8 measures skin colour. It consists of a series of screens to assist an adviser with colour measurement. This session is repeated three times. Fig. 8 depicts the Pop-up Screen 8.

Pop-up Screen 9 serves to obtain information for a new store. It is used by the installation team to correctly set up the store-specific parameters. Fig. 9 describes the Pop-up Screen 9.

Collection of data for the main office is found in Pop-up Screen 10. Data is placed in a store's outbox, and can then be transferred in three ways. These include: (1) remote computer can

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dial in and retrieve file from outbox; (2) transfer information to a server automatically using PC-anywhere script; and/or (3) copied to floppy disk and mailed to central site. Fig. 10 illustrates the Pop-up Screen 10.

5

Pop-up Screen 11 copies data from other stores. It can accept data in two ways. These include: (1) update using floppy supply by the main office; or (2) use of PC/Anywhere script to retrieve update file from main office outbox. Fig. 11 illustrates the Pop-

10 up Screen 11.

Pop-up Screen 12 allows selection of a colour lipstick family. The customer advisor can either enter a specific lipstick number, or choose a colour family, then choose a colour from the family.

15 The active colour palette will consist of individual palettes that contain that lipstick. The advisor can also enter a specific look (can be either from a previous visit or any of the available looks in the palette). Fig. 12 describes the pop-up Screen 12.

20 Pop-up Screen 13 allows selection of lipstick from a colour family (as selected from Pop-up Screen 12). If the lipstick is also in the palette recommendation based on skin tone, the colour is put first in the list, and (expert fit) is added to the name. Fig. 13 describes the Pop-up Screen 13.

25

Pop-up 14 shows product selections (treatments in cosmetic colours) made during the present session. Product selections can be made during colour viewing (Screen 6), treatment/product options (Overlay 24) or Recommended Foundation (Pop-up Screen 20).

30 There also is a display of recommended looks. Fig. 14 describes the Pop-up Screen 14.

Overlay Screen 15 is used to provide a snapshot of the type of customer. For detail purchase history, Overlay 7 provides the

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purchase information. Included in this screen are key purchase properties, group by type, over the past twelve months. It is automatically displayed for each customer. Fig. 15 lists the Overlay Screen 15.

5

Pop-up Screen 16 is a probe for calibration/routine and for messages to calibrate probe. Fig. 16 details the Pop-up Screens 16-19.

10 Pop-up Screen 20 is used to recommend the best foundation product combination based on skin colour and product preferences. Fig. 17 details the Pop-up Screen 20.

15 Pop-up Screen 21 is an advanced data management module. This is used by the main office. Fig. 18 details the Pop-up Screen 21.

Pop-up Screen 22 relates to language selection. Fig. 19 details Pop-up Screen 22.

20 Pop-up Screen 23 is used to locate and activate a client. If this is a new client, the 'new' button is clicked to create the new client file. Fig. 20 details Pop-up Screen 23.

25 Screen 24 details treatment/colour/fragrance options showing all the option products. Fig. 21 details Screen 24.

Overlay 25 focuses on skin colour analysis allowing selection of shade and tone. Fig. 22 details the Overlay 25.

30 The foregoing description illustrates selected embodiments of the present invention. In light thereof variations and modifications will be suggested to one skilled in the art, all of which are within the scope of this invention.

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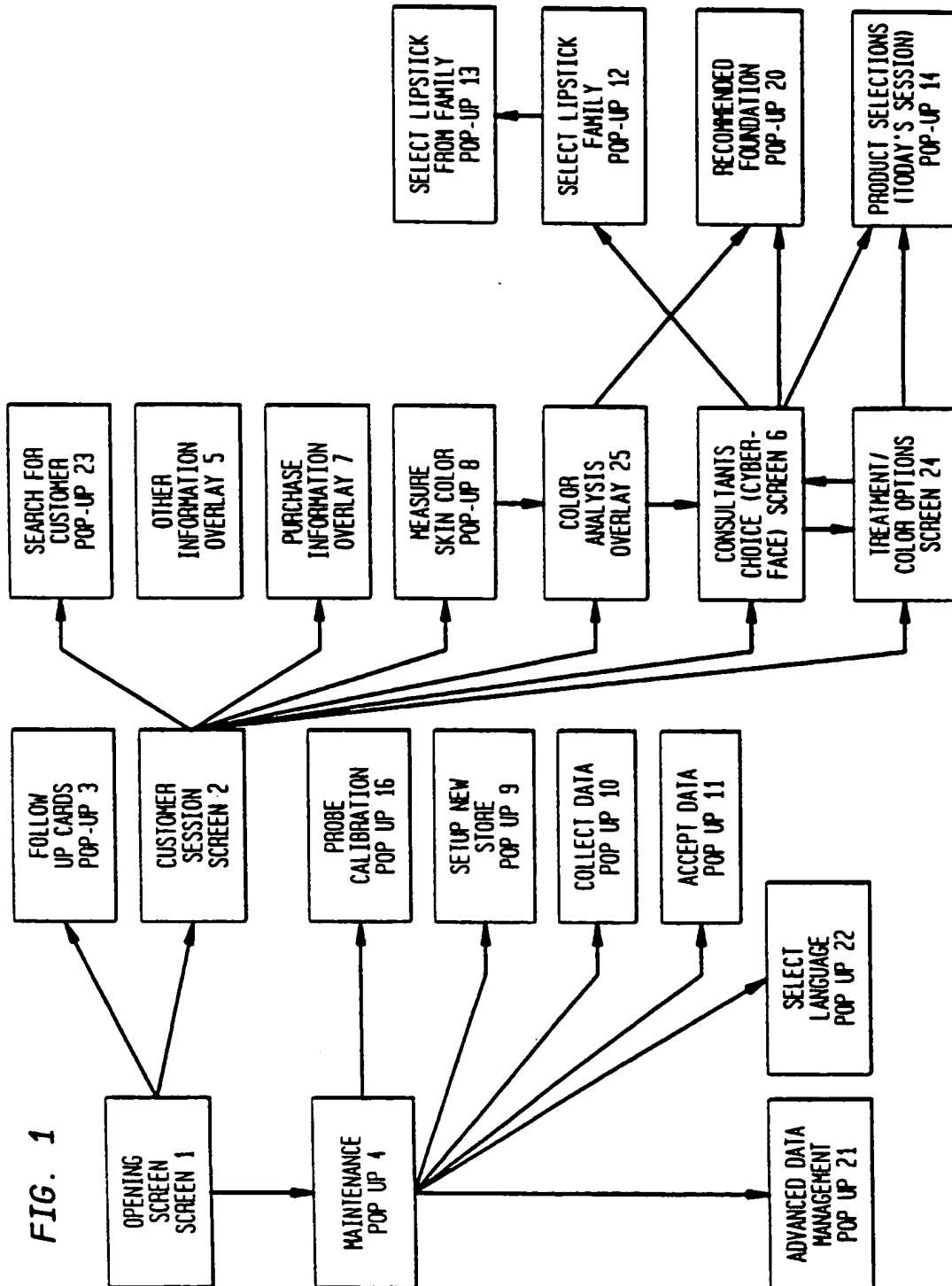
CLAIMS:

1. A method for selecting a facial colour cosmetic scheme, the method comprising:
 - 5 (i) providing a computer module including a colour monitor screen and a spectrophotometer;
 - (ii) measuring a customer's facial colour with the spectrophotometer;
 - 10 (iii) transmitting information on the measured facial colour to the computer module for display of that colour on a model face generated on the monitor screen;
 - (iv) allowing the customer to select at least one area of the face to be coloured with a colour cosmetic product; and
 - 15 (v) colouring the area of the model face with the selected colour.
2. The method according to claim 1 further comprising the steps of printing in colour on paper the displayed model face via a printer.
3. The method according to claim 1 or claim 2 wherein areas of the face to be coloured are those selected from the lips, eyelashes, eyelid, cheeks and combinations thereof.
4. The method according to any of the preceding claims wherein a program operated by the computer module stores information on a vendor's products which will achieve the selected colour when placed upon the selected area of the face.
5. A system for selecting a facial colour cosmetic scheme, the system comprising:

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- (i) a computer module connected with a colour monitor screen;
- (ii) a spectrophotometer for measuring skin colour;
- 5 (iii) a mechanism for transfer of facial colour data obtained from measurements with the spectrometer over to the computer module and transmission onto the monitor screen; and
- 10 (iv) an interactive program displayed on the monitor allowing a customer to select at least one colour for application to an area of a model face appearing on the monitor.

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FIG. 2

| | | | |
|----------------------|----------------------------|---------------------------------|---------------------------------|
| Beauty # | Name: <input type="text"/> | Customer # <input type="text"/> | ◇ Verify Address and Cust Infol |
| Personal Information | | | [SEARCH] |
| Name | | | [NEXT] |
| Last Name | | | [PREVIOUS] |
| Address | | | [CANCEL] |
| City | | State | [CLOSE] |
| Zip Code | Telephone | Date of Birth | Day |
| Month | | | |
| Profession | | | |
| ◇ Regular Client | ◇ Responds to Promotions | ◇ Responds to Mailing | |

(Overlay area - not to scale)

[OTHER INFORMATION]
 [PURCHASE HISTORY]
 [PURCHASE INFORMATION]
 [PRODUCT OPTIONS]
 [MEASURE SKIN COLOR]
 [COLOR ANALYSIS]
 [SHOW COLOR]

FIG. 3

Customer follow up cards

With clients information

| List of Names | Information On Selected Customer |
|---------------|----------------------------------|
| | [] CALL COMPLETE |
| | |
| | |
| | |
| | |
| | |

[PRINT]
 [CLOSE]

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FIG. 4

| MAINTENANCE |
|----------------------------------|
| [CALIBRATE SKIN READER] |
| [LANGUAGE] |
| [SET UP NEW STORE] |
| [COLLECT DATA FOR MAIN OFFICE] |
| [ACCEPT DATA FROM LOCAL STORES] |
| [ADVANCED DATA MANAGEMENT] |
| [CLOSE] |

FIG. 5

| OTHER INFORMATION | | | | |
|-------------------|-------------|----------------|---------------|---------------|
| Skin Type | Age Profile | Beauty Habits | Fragrance | Other Brands |
| ⊕ Sensitive | 15-20 | Make-up | Cologne | Biotherm |
| | 20-30 | Cleanser/Toner | Perfume | Channel |
| Normal to dry | 30-40 | Moisturizer | More than one | Clarins |
| Normal to oily | 40-50 | Special Treat. | Bath line | Clinique |
| Dry | 50+ | Sunscreens | | Dior |
| Oily | | Body Products | | Estee Lauder |
| | | | | H. Rubenstein |
| | | | | Lancaster |
| | | | | Lancome |
| | | | | Shiseido |
| | | | | YSL |
| | | | | Other |

Special Preferences of Needs:
 Prefers fragrance free products

[Accept]

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FIG. 6

| | |
|---|--|
| (Customer Name) <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: 80%;"> Cyberface Screen With look #. and individual color name </div> | (Date) <div style="display: flex; flex-direction: column; align-items: center;"> <div>[ANOTHER LOOK]</div> <div>[SELECT LIPSTICK FAMILY]</div> <div>[CONSULTANT'S CHOICE]</div> <div>[PRODUCT OPTIONS]</div> <div>[FOUNDATION]</div> </div> <div style="margin-top: 20px;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> PRODUCT SELECTIONS </div> </div> |
|---|--|

FIG. 7

| Purchase Information | | |
|----------------------|--------|-----------------|
| Today | 1 | JANE DOE |
| (1) Lipstick | 125 | Purchased |
| (1) Hydrolight | Bisque | Recommended |
| (1) Mousse | Bisque | Not Appropriate |
| | | |
| | | |
| Date | 905 | JANE DOE |
| (2) Ceramide Complex | | Sampled |
| | | |

| | | |
|----------|----------|-------------|
| Today | | |
| Look 001 | Plums | Recommended |
| Look 003 | Reds | Recommended |
| Look 004 | Naturals | Recommended |

[Recommended]

[Purchase]

[Sample]

[Not Appropriate]

[Remove]

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FIG. 8

MEASURE SKIN WITH COLOR READER
PRESS MEASURE TO RECORD COLOR FROM READER
OR ENTER L, A, B VALUES FROM REMOTE

| | | |
|----|----|----|
| L= | A= | B= |
| L= | A= | B= |
| L= | A= | B= |

COLOR READER IDENTIFICATION:

Foundation Color Match: [MEASURE]
[ACCEPT]
[CANCEL]

FIG. 9

Set up New Store

| Store Name | Store Number | City Number |
|------------|--------------|-------------|
| | | |

Highlight to Select New Store

| | | | | | | | | |
|-------|--|---|---|---|---|---|---|---|
| Store | <table><tbody><tr><td>A</td><td rowspan="6">↓</td></tr><tr><td>B</td></tr><tr><td>C</td></tr><tr><td>D</td></tr><tr><td>E</td></tr><tr><td>F</td></tr></tbody></table> | A | ↓ | B | C | D | E | F |
| A | ↓ | | | | | | | |
| B | | | | | | | | |
| C | | | | | | | | |
| D | | | | | | | | |
| E | | | | | | | | |
| F | | | | | | | | |

[ACCEPT]
[CANCEL]

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FIG. 10

| Collect Data for Main Office | |
|--|---|
| Retrieve Monthly Data To be sent to Main Office | January February March April May June ↓ |
| Select Month(s) and press Collect | |
| Create Disk? Yes/No | |
| Connect? Yes/No | [COLLECT] [CANCEL] |

FIG. 11

| Accept Data from Server | | |
|-------------------------------|---|----------------------|
| Store Name | Store Number | City Number |
| <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Highlight to Select New Store | | |
| Available Stores | A B C D E F ↓ | |
| | [CONNECT] [ACCEPT] [CANCEL] | |
| Copy Data from Disk? Yes/No | | |

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FIG. 12

| Lipstick Color Families | |
|-------------------------|--------------------------|
| Reds | Enter Number of Lipstick |
| Corals | <input type="text"/> |
| Pinks | Enter Number of Look |
| Naturals | <input type="text"/> |
| Plums | [ACCEPT] [CANCEL] |

FIG. 13

| Lipstick Family:Reds | |
|----------------------|----------------------------|
| 022 | Hollywood Red (Expert Fit) |
| 033 | Lush Red |
| 244 | Vintage |
| 255 | Gypsy |
| 375 | Baroque Red |

[ACCEPT]
[CANCEL]

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FIG. 14

| Today's Product Selections | | | |
|----------------------------|--------|-------------|---------------------|
| (*) Product Type | Color | | |
| ⊗ (1) Lipstick | 121 | Recommended | { Recommended } |
| ⊗ (2) Hydrolight | Bisque | Purchased | { Purchase } |
| ⊗ (1) Mousse | Bisque | Recommended | { Sample } |
| ⊗ Look 321 | Reds | Recommended | { Not Appropriate } |
| ⊗ Look 496 | Plums | Recommended | { Remove } |
| | | | { Print } |
| | | | { Accept } |

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FIG. 15

| Purchase History | | |
|---------------------------------|----------|-----------------|
| Last purchase: | Date | Jane Doe |
| Total purchases: | 2 (Last) | 12 (Past Year) |
| SkinCare (3) | | |
| ⊗(4) Ceramide Capsules | 30 Jan | Purchased |
| ⊗(3) Millenium Cream | 30 Nov | Purchased |
| ⊗(2) Perfection Cream | 30 Nov | Purchased |
| Color (2) | | |
| ⊗(1) Flawless Finish (121) | 30 Jan | Purchased |
| ⊗(1) Exceptional Lipstick (906) | 30 Dec | Purchased |
| Fragrance (1) | | |
| ⊗(1) Sunflowers | 30 Oct | Purchased |
| ⊗(1) Red Door | 30 Sep | Purchased |
| Fragrance (1) | | |
| ⊗ Red Door | 30 Jan | Sampled |
| ⊗ Exceptional Lipstick | 30 Jan | Recommended |
| ⊗ Perfection Cream | 30 Jan | Non-Appropriate |

⊗ - Denotes product type icon

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FIG. 16

| Pop-up 16 | Pop-up 17 | Pop-up 18 | Pop-up 19 |
|--|---|--|--|
| Probe Calibration Probe not calibrated! Warning: Skin Reader not calibrated - Continue anyway? (Y or N) | Switch to Set Cal. Plate Turn color reader off and on. Reader display should read 'Set Cal. Plate' Press (Enter) when ready! Cancel | Ready to Read Color Tile Place Color Reader on the White Plate. Press (Enter) when ready! Enter | Color Reading in Progress... Press button on color reader twice slowly To record calibration color Stop! Probe calibrated, OK to continue? Continue |

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FIG. 17

| Recommended Flawless Finish Foundation | | |
|--|----------|-------------|
| Product | Color | |
| Mousse | 234 | [Recommend] |
| Hydrolight | 123 | [Purchase] |
| Pressed Powder | Medium 2 | [Sample] |
| | | |
| | | [Accept] |

FIG. 18

| | | | |
|--------------------------|-----------|----|----------------------|
| Update Doors | Yes | No | |
| Update Product List | Yes | No | |
| Export new Clients | Yes | No | [Import Update File] |
| Clean returns database | Yes | No | [Create Update File] |
| Delete entries more than | 3 months | | [Print Returns] |
| | 6 months | | [Connect] |
| | 9 months | | [Close] |
| | 12 months | | |

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FIG. 19

| |
|--------------------|
| Language Selection |
| [English] |
| [Spanish] |
| [French] |

FIG. 20

| | |
|--|---|
| Search for Customer | |
| Name: | |
| List of Names | Information On Selected Customer |
| [ACCEPT] [NEW CUSTOMER] [CANCEL] | |

FIG. 21

| Treatment/Color Product Options | | | | | | | | | |
|---|---------|-------|---------------------------|--|-----------------|--|--------------------|--|---|
| <table border="1"> <tr> <th>Product</th> <th>Color</th> </tr> <tr> <td>Skin Illuminating Complex</td> <td></td> </tr> <tr> <td>Millenium Night</td> <td></td> </tr> <tr> <td>Millenium Energist</td> <td></td> </tr> </table> | Product | Color | Skin Illuminating Complex | | Millenium Night | | Millenium Energist | | [] Treatment [] Color [] Fragrance [Recommend] [Purchase] [Sample] [Not appropriate] [What's New] [ACCEPT] [CANCEL] |
| Product | Color | | | | | | | | |
| Skin Illuminating Complex | | | | | | | | | |
| Millenium Night | | | | | | | | | |
| Millenium Energist | | | | | | | | | |
| <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> Advertisement Video </div> | | | | | | | | | |

FIG. 22

| Skin Color Analysis | | Color Enhancements Options | |
|---|--|--|--|
| Skin Color Analysis | <div><div></div><div></div><div></div></div> | (Lighten color) (Darken color) | (Recommend Foundation) (Show Colors) (Close) |
| Tone (Golden/Red) | <div><div></div><div></div><div></div></div> | (Reduce Pink (add golden)) (Reduce golden (add pink)) | |
| Preferred Finish: () Matte () Natural | | | |

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FIG. 23

Store:
Consultant:
Date:



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EYESHADOW
EYELINER
LIPSTICK
LIPLINER
BLUSH
FOUNDATION
POWDER

INTERNATIONAL SEARCH REPORT

Int. l. Application No

PCT/EP 00/05407

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G06T11/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G06T

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

PAJ, EPO-Internal, WPI Data, IBM-TDB, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|----------|--|-----------------------|
| Y | EP 0 226 959 A (HORIKITA TSUKASA) 1 July 1987 (1987-07-01) page 2, line 26 -page 3, line 3 page 8, line 39 - line 56; figures 2,26 ---- | 1-3,5 |
| Y | US 5 751 829 A (KUBO JON C ET AL) 12 May 1998 (1998-05-12) abstract column 17, line 56 -column 18, line 2 ---- | 1-3,5 |
| A | PATENT ABSTRACTS OF JAPAN vol. 1999, no. 10, 31 August 1999 (1999-08-31) & JP 11 143352 A (ONISHI NETSUGAKU KOGYOSHOKK), 28 May 1999 (1999-05-28) abstract ----- -/-- | 1-5 |



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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Date of the actual completion of the international search

28 September 2000

Date of mailing of the international search report

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Perez Molina, E

INTERNATIONAL SEARCH REPORT

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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|----------|---|-----------------------|
| A | US 5 495 338 A (GOURIOU ELIANE ET AL) 27 February 1996 (1996-02-27) column 2, line 37 - line 66 --- | 1 |
| A | US 5 622 692 A (CASTRO JOHN R ET AL) 22 April 1997 (1997-04-22) cited in the application claims 1-3 --- | 1 |
| A | US 5 478 238 A (BAUDET REGINE ET AL) 26 December 1995 (1995-12-26) --- | |
| A | FR 2 728 982 A (ROBIN JEAN MARC) 5 July 1996 (1996-07-05) --- | |
| A | WO 98 58351 A (WALLIN NICHOLAS JAMES ;BRITISH TELECOMM (GB); MORTLOCK ANDREW NICH) 23 December 1998 (1998-12-23) ----- | |

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 00/05407

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|---|---------------------|--|--|
| EP 0226959 A | 01-07-1987 | JP 62144280 A CA 1261967 A | 27-06-1987 26-09-1989 |
| US 5751829 A | 12-05-1998 | NONE | |
| JP 11143352 A | 28-05-1999 | NONE | |
| US 5495338 A | 27-02-1996 | FR 2690822 A CA 2134985 A DE 69301129 D EP 0569291 A EP 0646339 A WO 9321794 A JP 7506504 T DE 69301129 T ES 2085734 T | 12-11-1993 11-11-1993 08-02-1996 10-11-1993 05-04-1995 11-11-1993 20-07-1995 04-07-1996 01-06-1996 |
| US 5622692 A | 22-04-1997 | AU 697347 B AU 7535794 A CA 2168558 A DE 69411924 D DE 69411924 T WO 9505892 A EP 0717657 A ES 2120065 T JP 9502022 T NZ 271658 A ZA 9406410 A | 01-10-1998 21-03-1995 02-03-1995 27-08-1998 17-12-1998 02-03-1995 26-06-1996 16-10-1998 25-02-1997 24-11-1997 23-02-1996 |
| US 5478238 A | 26-12-1995 | EP 0638261 A CA 2146134 A DE 69301239 D DE 69301239 T ES 2085741 T WO 9503727 A JP 2986214 B JP 8505078 T US 5797750 A | 15-02-1995 09-02-1995 15-02-1996 14-08-1996 01-06-1996 09-02-1995 06-12-1999 04-06-1996 25-08-1998 |
| FR 2728982 A | 05-07-1996 | AU 4452296 A WO 9621201 A | 24-07-1996 11-07-1996 |
| WO 9858351 A | 23-12-1998 | AU 8116498 A EP 0990224 A GB 2341070 A | 04-01-1999 05-04-2000 01-03-2000 |

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